

REMARKS

In response to the Non-Final Office Action dated January 17, 2007, Applicants respectfully request reconsideration based on the above claim amendment and the following remarks. Applicants respectfully submit that the claims as presented are in condition for allowance.

Claims 1-7 and 14-18 are pending in the present Application. Claims 1 and 14 are amended, leaving Claims 1-7 and 14-18 for consideration upon entry of the present amendment and following remarks.

Support for the amendment to Claims 1 and 14 is at least found in the specification, the figures, and the claims as originally filed. More particularly, support for Claims 1 and 14 is at least be found in the specification at page 12, lines 19 and 20, page 13, lines 19-24, page 15, line 24 through page 16, line 1, page 17, lines 4-7, page 18, line 20 to page 19, line 3 and page 21, lines 18-23, and in Figures 10-16.

Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

Claim Rejections Under 35 U.S.C. §103

In order for an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art; that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references; and that the proposed modification of the prior art must have had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); *Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996). See MPEP 2143.

Claims 1-3, 5, 7, 14, 15 and 17

Claims 1-3, 5, 7, 14, 15 and 17 are rejected under 35 U.S.C. §103(a) as being unpatentable over Applicant's Prior Art (Figs. 1-4) (hereinafter "APA") in view of Kubota et al., U.S. Patent No

6,771,334 (hereinafter “Kubota”). Applicants respectfully traverse the rejections.

Amended Claims 1 and 14 recite, *inter alia*,

“...a pixel electrode including

a transparent electrode connected to the output terminal of the thin film transistor through the contact hole disposed on the organic insulation layer, and

a reflective electrode disposed on the transparent electrode, having an area less than the transparent electrode and defining a first region of the transparent electrode,

a portion of the transparent electrode being exposed without being covered by the reflective electrode defining a second region,

the second region of the transparent electrode including a first boundary and a second boundary,

wherein the first boundary is a boundary between the first and second regions and the second boundary is an exposed edge of the transparent electrode....”

As conceded in the Office action regarding Claims 1 and 14 at Page 5, APA does not show “the second region including a second boundary where the second boundary is an exposed edge of the second region.” Accordingly, APA necessarily does not teach or suggest the second boundary is an exposed edge of the transparent electrode of amended Claims 1 and 14.

In the Office action with respect to Kubota, reflective electrode 3a disposed on a first region (reflective display region) facing a color filter 9 disposed on a counter substrate 5, and transmissive electrode 3b disposed in a second region (transmissive display region) facing a non-color layer 10 disposed on the counter substrate 5 without being covered by the reflective electrode of Kubota are cited as disclosing the “reflective electrode” and “transmissive electrode” of the claimed invention, respectively.

In the rejection details, the “regions” of Kubota are not considered as regions of the *transparent electrode*, but are merely regions where the reflective electrode 3a and the transmissive electrode 3b are respectively disposed. That is, the reflective and transmissive display regions of Kubota (Figures 1 and 4) are considered with reference to display regions of the LCD panel generally, and are not defined as a “first region” and a “second region” of the *transparent electrode*, as claimed.

In the rejection details, the reflective and transmissive display regions are also considered with reference to color filter 9 and non-color layer 10 (Figure 5a). The “first region” and “second region” of annotated 5a included on Page 6 of the Office action are indicated relative to the color filter 9 and non-color layer 10, and not definitively relative to the transmissive electrode 3a.

Kubota discloses that the color filter layer 9 is disposed only in the region facing the electrode for reflective display 3a. (Col. 12, lines 25-32 and Figures 4 and 5a.) However, Applicants find no teaching or suggestion in Kubota of the “reflective electrode **disposed on the transparent electrode**, having an area **less than the transparent electrode** and defining a first region of the transparent electrode” of amended Claims 1 and 14. Again, the “first region” and “second region” of Kubota as detailed in the Office action are not considered relative to the *transparent electrode* as claimed. To the contrary, the reflective electrode 3b of Kubota defines no region whatsoever on the transparent electrode 3a.

Even if the reflective electrode 3b of Kubota is considered as defining regions of the transparent electrode, Kubota does not teach or suggest the “reflective electrode **disposed on the transparent electrode**, having an area **less than the transparent electrode** and defining a first region of the transparent electrode” of amended Claims 1 and 14.

Kubota teaches a conductive film formed and processed to obtain a pixel electrode 3 including a reflective electrode 3a and a transmissive electrode 3b. (Col. 9, lines 45-53 and Figures 1 and 3.) The reflective electrode 3a is formed in a region above the reflective layer 20 and the transmissive electrode is formed in a region where neither the planarizing film 19 nor the reflective layer 20 are disposed. (*Id.*) That is, the “first region” (considered where the reflective electrode 3a is disposed) and the “second region” (considered where the transmissive electrode 3b is disposed) as detailed in the Office action are disposed in exclusive regions of the display panel of Kubota. Therefore, Kubota does not teach or suggest the “reflective electrode **disposed on the transparent electrode**, having an area less than the transparent electrode and defining a first region of the transparent electrode” of amended Claims 1 and 14. To the contrary, the reflective electrode 3a of Kubota is in a region exclusive of the transmissive electrode 3b and necessarily cannot be “disposed” on the transmissive electrode 3b.

Additionally, even if color filter 9 and non-color layer 10 in Figure 5a are considered as teaching where the reflective electrode 3a and transmissive electrode are disposed 3b, respectively, the color filter areas 9 and the non-color layer area 10 do not overlap in any way. To the contrary all of these areas are separated from each other (See Figure 5a). Therefore, Kubota further does not teach or suggest “reflective electrode **disposed on the transparent electrode**, having an area less than the transparent electrode and defining a first region of the transparent electrode” of amended Claims 1 and 14.

Furthermore, since Kubota does not teach or suggest the reflective electrode 3a disposed on the transmissive electrode 3b, the reflective electrode 3a does not “cover” the transmissive electrode” in any way. Since the reflective electrode 3a of Kubota does not “cover” the transmissive electrode, the reflective electrode 3a does not define a “first region” of the transmissive electrode such that there is defined a “second region” of the transmissive electrode as claimed. Since a “first region” and a “second region” of the transmissive electrode are not defined in Kubota as claimed, Kubota necessarily does not teach or suggest the first boundary is a boundary between the first and second regions of the transparent electrode and the second boundary is an exposed edge of the transparent electrode of amended Claims 1 and 14.

Therefore, Kubota does not remedy the deficiencies of APA with respect to amended Claims 1 and 14.

Therefore, APA and Kubota, alone or in combination, do not teach or suggest the first boundary is a boundary between the first and second regions of the transparent electrode and the second boundary is an exposed edge of the transparent electrode of amended Claims 1 and 14.

Applicants further submit that there exists no suggestion or motivation to combine the references to teach the claimed invention.

Since Kubota does not teach or suggest the reflective electrode disposed on the transmissive electrode in any way, and to the contrary teaches the electrodes are disposed mutually exclusively, one having ordinary skill in the art would not look to Kubota to define first and second regions of a transparent electrode of APA defined by where a reflective electrode is disposed on a transparent electrode.

If the electrodes of APA were disposed as taught in Kubota, a “first region” and a “second region” would not be defined for all the reasons discussed above with respect to Kubota. That is, the reflective electrode (first region) would be mutually exclusive from the transmissive electrode (second region). Therefore, there exists no suggestion or motivation to combine the reflective electrode 3a and transmissive electrode 3b as taught by Kubota with APA to teach boundaries between regions of *the transparent electrode* of the claimed invention.

Thus, as discussed above, APA and Kubota, alone or combination, *fail to teach or suggest all of the limitations* of amended Claims 1 and 14. Thus, *prima facie* obviousness does not exist regarding amended Claims 1 and 14 with respect to APA and Kubota.

Since the relied-upon references *fail to teach or suggest all of the limitations* of amended Claims 1 and 14, and since combining the references teaches contrary to the claimed invention, clearly, one of ordinary skill at the time of Applicants' invention would not have a *motivation to modify or combine the references*, nor a reasonable likelihood of success in forming the claimed invention by the Examiner's modifying or combining the references. Thus, here again, *prima facie* obviousness does not exist. *Id.*

Thus, *prime facie* does not exist with respect to APA and Kubota. Applicants respectfully submit that Claims 1 and 14 are not further rejected or objected and are therefore allowable. Claims 2, 3, 5, 7, 15 and 17 variously depend from Claims 1 and 14, are not further rejected or objected and are correspondingly allowable as depending upon allowable Claims 1 and 14. Reconsideration, withdrawal of the relevant claim rejections and allowance of Claims 1-3, 5, 7, 14, 15 and 17 are respectfully requested.

Claims 4, 6, 16 and 18

Claims 4, 6, 16 and 18 are rejected under 35 U.S.C. §103(a) as being unpatentable over APA in view of Kubota and further in view of Kubo et al., U.S. Patent No. 6,452,654 (hereinafter Kubo). Applicants respectfully traverse the rejections.

Claims 4, 6, 16 and 18 depend from and inherit all of the limitations of Claims 1 and 14, respectively. As discussed above, Claims 1 and 14 are allowable over APA and Kubota.

Kubo is relied upon as teaching the sidewall of the reflective electrode is inclined to prevent the impurity from being stacked at the boundary. Kubo also does not teach or suggest disclose the first boundary is a boundary between the first and second regions of the transparent electrode and the second boundary is an exposed edge of the transparent electrode of amended of the claimed invention, and does not remedy the deficiencies of APA and Kubota. Therefore, APA, Kubota and Kubo, alone or in combination, fail to teach or suggest all of the limitations of Claims 4, 6, 16 and 18, as inheriting all the limitations of Claims 1 and 14.

Thus, *prime facie* obviousness does not exist regarding Claims 4, 6, 16 and 18 with respect to APA, Kubota and Kubo. Applicants respectfully submit that Claims 4, 6, 16 and 18 are not further rejected or objected and are therefore allowable. Reconsideration, withdrawal of the relevant claim rejections and allowance of Claims 4, 6, 16 and 18 are respectfully requested.

Conclusion

In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued.

If the Examiner believes that a telephone conference with Applicants' attorneys would be advantageous to the disposition of this case, the Examiner is cordially requested to telephone the undersigned.

In the event the Commissioner of Patents and Trademarks deems additional fees to be due in connection with this application, Applicants' attorney hereby authorizes that such fee be charged to Deposit Account No. 06-1130

If there are any charges due with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Applicants' attorneys.

Respectfully submitted,

CANTOR COLBURN LLP

By: /Amy Bizon-Copp/
Amy Bizon-Copp
Reg. No. 53,993
CANTOR COLBURN LLP
55 Griffin Road South
Bloomfield, CT 06002
Telephone (860) 286-2929
Facsimile (860) 286-0115
Customer No. 23413

Date: April 17, 2007